

FACULTY OF ENGINEERING AND TECHNOLOGY
CEF 344: LAP REPORT

CRUD APPLICATION

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AIMS AND OBJECTIVES

Objective: Develop a blog application where users can create, read, update and delete posts.

Skills learned: Database operations, React forms and handling user input, and routing in both React and Node.js

TOOLS AND MATERIALS USED

Frontend : -React

- Bootstrap/css

- react-router-dom package, and some react hooks.

Backend : -Node.js/express

- Mongodb

- jsonwebtoken package(jwt), cookie-parser, cors, bcryptjs,mongoose,dotenv

Vs code, chrome browser

PROCEDURE

After designing and implementing the blog app UI , it was integrated with the backend. The backend made use of jsonwebtoken package which is a token-based authentication strategy to authenticate various users and keep track of their posts.

The react-router-dom package was used for routing on the frontend

Some common react hooks like useStates,useEffect where used to handle form input and also re-rendering.

The cookie-parser package was used to include cookies in the response object before sending back to the browser .

Initially cors was used to facilitate sending request from the react server to the node.js server, but eventually I set up the react project to run directly on the node server.

Bcryptjs package was used to hash user passwords before storing in the database and compare hashed passwords with plain text during login.

Mongoose package was used to ease management and setting up of the MongoDB database and also storing user info and user posts in the database.

The dotenv was used to load environment variables from the .env file. The .env file included sensitive information such as MongoDB server URL and cookie secret key.

The CRUD application was built to function as follows

- Multiple posts can be created, read, updated or deleted by a single user
- Users who are authenticated will have their posts stored in the database and the posts can be viewed at any time as long as they are logged in
- For users not logged in, they can create, read, update and delete posts too but changes/progress will be lost each time they refresh the app or revisit.

Some results of my implementation can be seen below



